REMARKS

The present reply is responsive to the Office Action dated September 11, 2007. Claims 1-11, 13-24, 26-60 and 63-89 are again presented for the Examiner's consideration in view of the following remarks. The rejections will be addressed in view of the claims as presently presented.

A Notice of Appeal was previously filed on October 16, 2007. A Communication to the Examiner ("Communication") was submitted along with the Notice of Appeal to expressly identify several pending applications for the same assignee which contain similar subject matter to the instant application.

As explained in the Communication, those applications are U.S. Patent Application No. 10/812,155 ("the '155 application"), U.S. Patent Application No. 10/959,700 ("the '700 application"), and U.S. Patent Application No. 10/801,308 ("the '308 application"). The details of the Communication are hereby incorporated by reference.

A Request for Continued Examination is submitted herewith so that the Communication may be considered by the Examiner in the instant case. An Information Disclosure Statement is also submitted herewith and contains previously unsubmitted references which were identified in the Office Actions of the other pending applications.

Turning to the rejections as set forth in the September 11, 2007 final Office Action, applicant incorporates the arguments as set forth in the June 21, 2007 amendment as they apply as well to the final Office Action, with the exception being that the § 112, ¶ 2 rejection of claim 2 has been withdrawn.

The multiplicity rejection was made in the instant Office Action pursuant to 35 U.S.C. § 112, ¶ 2 in view of M.P.E.P. § 2173.05(n). Applicant respectfully traverses the multiplicity rejection.

In support of the rejection, the Office Action states that the 89 claims, including 11 independent claims, "contain limitations from multiple embodiments that are assorted into multiple different independent claims in an unclear manner and result in a 'maze of confusion.'" (Office Action, numbered section 4, p.7.)

As explained previously, applicant has paid $1,930 in extra claim fees for the 89 claims as filed. The Office Action has not provided any concrete reason to justify the refusal to examine all the claims. This is contrary to case law, including case law cited by the M.P.E.P. concerning multiplicity. Specifically, it has been held that an Examiner should set forth "typical examples of substantial duplication or lack of material differentiation" among the claims, and that reliance on "mere opinion" is insufficient to support a multiplicity rejection. *In re Flint*, 411 F.2d 1353, 1356, C.C.P.A. 1969. In *Flint*, the Court reversed a multiplicity rejection even though the examiner did set forth typical examples of substantial duplication.

Because the Office Action fails to set forth any concrete examples of undue multiplicity as asserted, it appears that reliance was made solely on the mere opinion of the Examiner. Applicant respectfully submits that for at least these reasons the rejection is improper and should be withdrawn. In the alternative, applicant requests that the USPTO return the $1,930 paid in extra claim fees.

The rejection of claim 2 under 35 U.S.C. § 112, second paragraph has been withdrawn per page 3 of the September 11, 2007 Office Action.

The Office Action rejected claims 1-12, 24, 26-31, 33-34, 53-60 and 63 under 35 U.S.C. § 101 as being drawn to non-statutory subject matter. Applicant respectfully traverses the rejection.

Independent claim 1 was previously amended to recite "A method of scheduling operations to be performed by a

component having a thermal threshold comprising: providing a plurality of operations to be performed by the component; associating the operations with a thermal attribute, the thermal attribute representing a value related to a heat amount expected to be generated or incurred by the component during performance of the operations; determining a cooling attribute; scheduling the operations in an order of performance based on the thermal attribute and the cooling attribute so that the thermal threshold is not exceeded; and generating the order of performance for use in execution of the operations."

Independent claim 24 was previously amended to recite "A processing system comprising: a computing device including a component; a plurality of operations to be performed by the component, at least some of the operations including a priority; at least one thermal attribute associated with the component and a selected one of the operations, the thermal attribute being indicative of a change in temperature of the component after performance of the selected operation; a plurality of priority queues, each priority queue including a first queue and a second queue, the first queue for storing a first set of the operations and the second queue for storing a second set of the operations; and a scheduler operable to assign at least one of the operations to the component depending on the thermal attribute."

And independent claim 53 was previously amended to recite "A processing apparatus for processing operations associated with thermal attributes, comprising: a memory for storing a first operation and a second operation, the first operation having a thermal attribute exceeding an operating threshold, and the second operation having a thermal attribute not exceeding the operating threshold; and a plurality of processing devices for executing the first and second operations, at least a selected one of the processing devices comprising a sub-processing unit, and at least some of the processing devices having a thermal threshold and access to the

memory; wherein, if the thermal threshold of the selected processing device is not exceeded, the selected processing device is operable to obtain the first operation from the memory for processing and to process the first operation, and if the thermal threshold of the selected processing device is exceeded, the selected processing device is operable to obtain the second operation from the memory for processing and to process the second operation, and wherein the memory comprises a local store in the sub-processing unit, and the local store includes a first queue for managing the first operation and a second queue for managing the second operation."

Applicant submits that independent claims 1, 24 and 53 each recite a concrete, useful and tangible result and are thus clearly statutory under § 101. By way of example only, method claim 1 requires generating an order of performance. Processing system claim 24 requires a scheduler that is operable to assign at least one of the operations to the component depending on the thermal attribute. And processing apparatus claim 53 requires that if the thermal threshold is not exceeded, the selected processing device is operable to obtain a first operation from memory for processing and to process the first operation, and if the thermal threshold is exceeded, the selected processing device is operable to obtain the second operation from memory for processing and to process the second operation.

Furthermore, applicant notes that the Office Action states that "paragraph 74 of the instant application recites, 'The compiler may be implemented in software, firmware, hardware or a combination of the above.' Therefore the claimed limitations may be entirely software and are therefore non-statutory since 'software per se' does not fall under an approved statutory category." (Office Action, numbered section 3, p.6.) This statement in the Office Action is wholly without merit. None of the claims in the application positively recite

a compiler. Thus, the Office Action statement simply doesn't apply to the rejected claims. In addition, it is black letter law that it is improper to read limitations from the specification into the claims. (*See Teleflex, Inc. v. Ficosa N. Amer. Corp.*, 299 F.3d 1313 (Fed. Cir. 2002) ("limitations from the specification are not to be read into the claims.") (*Id.* at 1326)).

For at least the reasons presented above, applicant submits that independent claims 1, 24 and 53 are drawn to statutory subject matter, and that the subject dependent claims are likewise drawn to statutory subject matter. Thus, applicants request that the § 101 rejection be withdrawn.

Claims 1-11, 24, 26-31, 33-34, 53-60 and 63 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Publication No. 2002/0065049 ("*Chauvel*"). Applicant respectfully traverses the rejection.

Claim 1 was amended to include the subject matter of dependent claim 12, which stands cancelled. Thus, claim 1 now includes "determining a cooling attribute" and "scheduling the operations in an order of performance based on the thermal attribute and the cooling attribute so that the thermal threshold is not exceeded."

The Office Action asserts that paragraph 0008 of *Chauvel* teaches the cooling attribute limitations of former claim 12. However, what paragraph 0008 of the reference actually states is:

> [0008] In addition to overall energy savings, in a complex processing environment, the ability to dissipate heat from the integrated circuit becomes a factor. An integrated circuit will be designed to dissipate a certain amount of heat. If tasks (application processes) require multiple systems on the integrated circuit to draw high levels of current, it is possible that the circuit will overheat, causing system failure or errant behavior.

As explained in the prior amendment, there is simply no teaching or suggestion in the cited portion of Chauvel or elsewhere of a cooling attribute as claimed. The "broadest reasonable interpretation" of the claimed cooling attribute should be understood in view of what the application describes. See, for instance, specification paragraphs 0067-0072. The Office Action appears to ignore what a cooling attribute actually is and instead points to the above-quoted paragraph in *Chauvel* and further argues inherency. Applicant respectfully disagrees as this is wholly inconsistent with cooling attributes as disclosed in the instant application.

Thus, for at least this reason, applicant submits that independent claim 1 is patentable over *Chauvel*. Furthermore, claims 2-11 depend from claim 1 and contain all the limitations thereof. In view of the above, applicant requests that the rejection of claim 1 and subject dependent claims 2-11 be withdrawn.

With regard to independent claim 24, this claim was previously amended to recite, in part, "a plurality of operations to be performed by the component, at least some of the operations including a priority" and "a plurality of priority queues, each priority queue including a first queue and a second queue, the first queue for storing a first set of the operations and the second queue for storing a second set of the operations."

And with regard to independent claim 53, this claim was previously amended to recite, in part, "wherein, if the thermal threshold of the selected processing device is not exceeded, the selected processing device is operable to obtain the first operation from the memory for processing and to process the first operation, and if the thermal threshold of the selected processing device is exceeded, the selected processing device is operable to obtain the second operation from the

23

memory for processing and to process the second operation, and wherein the memory comprises a local store in the sub-processing unit, and the local store includes a first queue for managing the first operation and a second queue for managing the second operation."

Thus, claims 24 and 53 each refer to a dual queue configuration. In rejecting now cancelled claims 32 and 62, the prior Office Action asserted that *Chauvel* disclosed a plurality of priority queues. Specifically, that Office Action asserted that paragraph 0030 of *Chauvel* disclosed a dual queue configuration. *See* p.8 of the Office Action. However, what this paragraph of *Chauvel* actually states is:

> [0030] Referring to **FIGS. 1 and 2,** the operation of the multiprocessor system **10** is discussed. The multiprocessor system **10** can execute a variety of tasks. A typical application for the multiprocessor system **10** would be in a smartphone application where the multiprocessor system **10** handles wireless communication, video and audio decompression, and user interface (i.e., LCD update, keyboard decode). In this application, the different embedded systems in the multiprocessor system **10** would be executing multiple tasks of different priorities. Typically, the OS would perform the task scheduling of different tasks to the various embedded systems.

Applicant again submits that nothing in the cited section or elsewhere in *Chauvel* teaches or suggests the first and second queues as claimed. In fact, *Chauvel* does not even mention queues at all in its disclosure. Applicant respectfully submits that a queue is not "merely a schedule of tasks" as asserted in the rejection.

Thus, for at least these reasons, applicant submits that independent claims 24 and 53 are patentable over *Chauvel*. Furthermore, the subject dependent claims depend from claims 24 and 53, respectively, and contain all the limitations thereof. In view of the above, applicant requests that the rejection of

claims 24 and 53 and their subject dependent claims be withdrawn.

As it is believed that all of the rejections set forth in the Office Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which he might have. If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: October 31, 2007   Respectfully submitted,

By _____
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